

1. A method of controlling adhesions following a surgical procedure,
2 comprising the steps of:
providing a human recombinant phage antibody; and
4 introducing the antibody onto or into an area of the body following the procedure
to inhibit adhesions, or scar formation.

2. The method of claim 1, including antibodies to one or more of the
2 following:
Transforming Growth Factors-Beta (TGF-Beta),
4 Platelet Derived Growth Factors (PDGF),
Insulin-like Growth Factors (IGF),
6 Transforming Growth Factor-Alpha (TGF-alpha),
Epidermal Growth Factor (EGF),
8 Interleukins,
Leukocyte Derived Growth Factor (LDGF),
10 Fibroblastic Growth Factors (FGF),
Vascular Endothelial Growth Factor (VEGF),
12 Heparin-Binding Epidermal Growth Factor (HB-EGF),
Bone Morphogenetic Proteins (BMP), and
14 other cytokines associated with wound healing.

3. The method of claim 2, including antibodies to TGF- β 1, TGF- β 2, TGF- β
2 3, Mannose-6-phosphate, and transglutaminase inhibitors.

4. The method of claim 1, wherein the antibody is used to prevent the
2 formation of scar tissue following spinal surgery.

5. The method of claim 1, wherein the antibody is placed over the dura lining
2 the spinal nerves and spinal cord.

2 6. The method of claim 1, wherein the antibody is used to inhibit
adhesions following abdominal surgery.

2 7. The method of claim 1, wherein the antibody is placed around the great
vessels after an anterior approach to the spine.

2 8. The method of claim 1, wherein the antibody is used to inhibit adhesion
formation adjacent to areas where growth factors are used to stimulate healing.

2 9. The method of claim 1, including the steps of:
adding growth factors to an area of the body where bone or tissue regeneration is
desired; and
4 using antibodies to the growth factors with respect to areas where adhesion
prevention is desired.

2 10. The method of claim 9, including the steps of:
adding growth factors in conjunction with spinal fusion and bone ingrowth for
artificial disc replacement; and
4 using antibodies to the growth factors with respect to the dura, nerves, and spinal
cord to prevent adhesion.

2 11. The method of claim 9, including the steps of:
adding growth factors to accelerate an intestinal anastomosis; and
using antibodies to inhibit intra-abdominal adhesions.

2 12. The method of claim 9, further including the step of:
protecting the growth factors and/or the area of the body where stimulated healing
is desired from the antibodies to the growth factors.

2 13. The method of claim 9, further including the step of:
providing the growth factors in a slowly resorbing gel or polymer; and
4 placing the slowly resorbing gel or polymer over the area where healing is
desired.

2 14. The method of claim 9, further including the step of:
slowly releasing the growth factors into the treatment area.

2 15. The method of claim 9, further including the step of:
incorporating the growth factors into a hydrogel to effectuate slow release.

2 16. The method of claim 9, further including the step of:
slowly releasing concentrated growth factors into the treatment area after the
antibodies to the growth factors are no longer present or active.

2 17. The method of claim 9, further including the step of:
using a composite slow-release device to introduce a growth factor.

2 18. The method of claim 17, wherein the composite slow-release device is the
central portion of a hydrogel device containing growth factors.

2 19. The method of claim 18, wherein the outer portion of the hydrogel device
contains antibodies to growth factors, allowing the device to first release antibodies to
growth factors, then release growth factors.

2 20. The method of claim 1, further including the step of adding other
medications or therapeutic substances to the antibody.

21. The method of claim 1, including antibodies to proteases that activate the
2 latent form of TGF-beta.

22. The method of claim 1, including the use of a protease inhibitor.

23. The method of claim 22, wherein the protease inhibitor is an enzyme that
2 deactivates the protease.

24. The method of claim 22, wherein the ph of the local environment is altered
2 to deactivate the protease.

25. The method of claim 1, wherein the antibodies are released from a cardiac
2 stent or other implant.

26. The method of claim 20, wherein the other medications or therapeutic
2 substances include drugs that prevent the adhesion of platelets, interrupt cell
reproduction, prohibit inflammation, or block the receptors for the growth factors.